

Docket No. 6173-29US

IN THE CLAIMS:

Please amend the claims in accordance with the following listing of claims:

1. (Currently Amended) A method of providing location-based services for a call in a packet switched wireless communications network having at least one user equipment, the method comprising the steps of:
sending a first request to setup a communication channel from the user equipment to a first network element to a second network element, said first request having an indication ~~in said request~~ indicating that the communication channel will be used for transferring a call which requires location-based services;
receiving the first request in a first network element; and
selecting a second network element in accordance with said indication,
wherein traffic on said communication channel is filtered according to filtering information set by said first network element or said second network element.
2. (Currently Amended) A method as recited in claim 1, further comprising the steps of:
determining an identity of an entity wherein said second first network element contacts a local entity which is capable of handling set calls; and
forwarding said identity to the user equipment.
3. (Currently Amended) The method as recited in claim 2, further comprising the steps of:
returning an accept message from said ~~second network element~~ to said first network element to said user equipment, said accept message acknowledging said first request; and
providing the an address of an the entity to the user equipment ~~handling said call.~~
4. (Original) The method as recited in claim 2 or 3, further comprising the step

Docket No. 6173-29US

of transferring said call to said entity.

5. (Cancelled)

6. (Currently Amended) The method recited in claim 15, wherein said data traffic on said communication channel comprises data traffic ~~is filtered according to filtering information set by said second network element or said third network element.~~

7. (Currently Amended) The method recited in claim 14, wherein the first ~~second~~ network element sends a second request to start location measuring to a location calculating entity when receiving said first request from said user equipment ~~first network element.~~

8. (Currently Amended) The method recited in claim 7, wherein the location calculating entity sends the measured location information to the first network element which forwards it further to a GMLC ~~request is a SM Service Request.~~

9. (Currently Amended) The method recited in claim 24, wherein said second network element sends said first request to setup said communication channel to a third network element.

10. (Currently Amended) The method recited in claim 9, wherein said third network ~~element~~ element gets a traffic flow template (TFT) as filtering information in response to said first request to setup said communication channel.

11. (Currently Amended) The method recited in claim 10, wherein said second ~~third~~ network element is a Gateway GPRS Support Node (GGSN).

12. (Currently Amended) The method ~~recited in~~ of any of the preceding claims 1, wherein said first ~~second~~ network element is a Serving GPRS Support Node (SGSN).

Docket No. 6173-29US

13. (Currently Amended) The method recited in claim 4, wherein said second network element is ~~an Internet GPRS Service Node (IGSN)~~ which sets a traffic flow template (TFT) as filtering information in response to said first request to setup said communication channel.

14. (Currently Amended) The method recited in claim 4, wherein a parameter in said first request is used to indicate that said communication channel will be used for transferring an emergency call.

15. (Currently Amended) The method recited in claim 14, wherein said parameter in said first request is the Access Point Name (APN).

16. (Currently Amended) The method recited in claim 17, wherein the first request is one of an Activate PDP Context Request, an Activate Secondary PDP Request, an Activate AA PDP Context Request, or an Activate Emergency PDP Context Request.

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Currently Amended) The method recited in claim 4, wherein said user equipment ~~first network element~~ sends location information to said entity ~~handling said call~~.

21. (Original) The method of claim 20, wherein said location information is Service Area Identification (SAI), Routing Area Identity (RAI), Cell-ID, coordinate information or any combination of these.

Docket No. 6173-29US

22. (Currently Amended) The method recited in claim 204 wherein ~~said second network element sends location information to said entity~~ comprises an entity handling said emergency calls.

23. (Currently Amended) The method recited in claim 224 wherein said entity handling said emergency calls may request location information from the GMLC ~~a location calculation entity.~~

24. (Currently Amended) The method recited in claim 74 wherein said location calculating entity is a Radio Network Controller (RNC).

25. (Cancelled)

26. (Currently Amended) The method recited in claim 23, wherein said entity ~~handling said call~~ comprises a Call State Control Function (CSCF) or a Public Safety Answering Point (PSAP).

27. (Currently Amended) A packet switched wireless communication network
~~The method recited in claim 3, wherein comprising:~~

at least one user equipment;

a first network element, said first network element sends-receiving a first request to setup a secure communication channel for signaling prior to sent from said at least one user equipment, said first request to setup said communication channel indicating having an indication that said call is the communication channel will be used for transferring a call requiring location-based services; and

a second network element, said second network element being selected in accordance with said indication.

wherein traffic on said communication channel is filtered according to filtering information set by said first network element or said second network element.

Docket No. 6173-29US

28. (Currently Amended) The ~~network method~~ recited in claim 27, wherein said first network element is a Serving GPRS Support Node (SGSN)~~request to setup a secure communication channel for signaling is an SM Service Request.~~

29. (Currently Amended) ~~The method recited in claim 28, wherein the second~~
A network element in a packet switched wireless communication network, said network element configured to carry out a method comprising the steps of:

receiving sends a request to setup a communication channel from a user equipment, initiate location measuring in response to said request having an indication that the communication channel will be used for transferring a call which requires location-based services; and

selecting another network element in accordance with said indication.

wherein traffic on said to setup secure communication channel for signaling is filtered according to filtering information set by said network element or said another network element.

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)

33. (Previously Amended) A method of providing location-based services for a call from a first network element (UE) in a packet switched wireless communications network, the method comprising the steps of:

providing location information for the said first network element (UE) from a second network element in a radio access network (RAN); and

sending a first a request to setup a call from the said first network element (UE) to a third network element (CSCF) , said request including the said location information for the first network element(UE).

Docket No. 6173-29US

34. (Previously Amended) A method according to claim 33, wherein the first network element sends a second request to activate a communication connection (PDP Context) to a fourth network element (SGSN) in the radio access network, the request including an indication that the communication connection is for emergency call.

35. (Previously Amended) A method according to claim 33, wherein the location information is provided in a RRC message.

36. (Previously Amended) A method according to claim 33, wherein the location information is broadcasted to the first network element (UE).

37. (Previously Amended) A method according to claim 33, wherein the location information is forwarded to a fourth network element (SGSN) from the second network element in the radio access network (RAN), the fourth network element (SGSN) sending the location information in an acceptance message to the second request to activate the communication connection (PDP Context) for the first network element (UE) before said request to set up a call.

38. (Currently Amended) A method according to claim 343, wherein the location information for the first network element is relayed to a GMLC and further relayed to an entity handling emergency calls ~~communication connection is a PDP context and the acceptance message is the Accept PDP Context Activation message.~~

39. (Currently Amended) A method according to claim 348, wherein the communication connection is a PDP context and the acceptance message is the Accept PDP Context Activation message.

40. (Previously Amended) A method according to claim 33, wherein the location information is provided to the first network element as a part of a positioning method.

Docket No. 6173-29US

41. (Previously Amended) A method according to claim 33, comprising a further step of selecting an entity (PSAP) handling emergency calls in the packet switched network based at least in part, on the said location information included in the said request.

42. (Previously Amended) A method according to claim 33, wherein the call is an emergency call.

43. (Previously Amended) A method according to claim 33, wherein the fourth network element (SGSN) allocates a temporary PS Domain Identifier for the call.

44. (Previously Amended) A method according to claim 43, wherein the fourth network element (SGSN) sends the said temporary PS Domain identifier to an entity maintaining location information (GLMC).

45. (Previously Amended) A method according to claim 43 or 44, wherein the said temporary PS Domain Identifier is sent from the fourth network element (SGSN) to the first network element (UE), from the first network element (UE) to the third network element (CSCF) and from the third network element (CSCF) to the entity handling emergency calls (EC).

46. (Previously Amended) A method according to claim 44, wherein the temporary PS Domain identifier is used to identify an emergency call, when an entity handling emergency calls (EC) requests location information from an entity maintaining location information (GLMC).

47. (Previously Amended) The method according to claim 33, wherein said third network element is a call state control function (CSCF).

48. (Previously Amended) The method recited in claim 42, further comprising the step of returning an accept message in response to a request for an emergency call from the

Docket No. 6173-29US

fourth network element, said accept message acknowledging said request and providing the address of said third network element.

49. (Previously Amended) The method recited in claim 41, further comprising the step of transferring said emergency call to said selected entity.

50. (Previously Amended) The method recited in claim 33, wherein the fourth network element (SGSN) indicates to the radio access network to start a positioning method in order to get a location estimate in response to receiving said second request from said first network element (UE).

51. (Previously Amended) The method recited in claim 37, wherein said second network element requests the location information from the radio access network corresponding to the first network element in response to receiving said request for an emergency call from said first network element.

52. (Previously Amended) The method recited in claim 50, wherein the location estimate obtained by said positioning method is provided to a Gateway Mobile Location Centre (GMLC).

53. (Previously Amended) The method recited in claim 51, wherein said selected entity handling emergency calls obtains said location estimate from said Gateway Mobile Location Centre (GMLC).

54. (Cancelled)

55. (Currently Amended) The method recited in claim 53, wherein the call is identified using an assigned phone number when said selected p entity handling emergency calls (PSAP) obtains said location estimate from said Gateway Mobile Location Center (GMLC).

Docket No. 6173-29US

56. (Previously Amended) The method recited in claim 50, wherein the positioning method is performed in the first network element (UE).

57. (Previously Amended) The method recited in claim 33, wherein the first network element (UE) requests that a positioning method be started at the same time that it sends the call setup request, and wherein the first network element is a user equipment (UE, MS), said location information being Service Area Identification (SAI), Routing Area Identity (RAI), Cell ID, coordinate information or any combination of these.

58. (Cancelled)

59. (Cancelled)

60. (Previously Amended) The method according to claim 33, wherein the said location information is Service Area Identification (SAI), Routing Area Identity (RAI), Cell-ID, coordinate information or any combination of these.

61. (Previously Amended) A packet switched wireless communication network, comprising:
a user equipment (UE);
a radio access network (RAN); and
a first network element in the radio access network, said first network element providing location information for said user equipment; and
a second network element in the packet switched network, said second network element receiving a request from the user equipment to set up a call to said first network element, the request including said location information for the user equipment.

62. (Previously Amended) A packet switched wireless communication network according to claim 61, wherein said second network element is a call state control function (CSCF) or a Public Safety Answering Point (PSAP).

Docket No. 6173-29US

63. (Previously Amended) A packet switched wireless communication network according to claim 62, wherein said first network element receives said Serving Area ID and forwards said Service Area ID to said the user equipment.

64. (Previously Amended) A packet switched wireless communication network according to claim 63, further comprising a call control entity receiving said Service Area ID in an emergency call setup request from the user equipment.

65. (Previously Amended) A packet switched wireless communication network according to claim 64, wherein said call control entity has a database identifying a plurality of Public Safety Answering Points (PSAPS) and corresponding said plurality of Public Safety Answering Point with Service Area IDs.

66. (Previously Amended) A packet switched wireless communication network according to claim 64, wherein said call control entity selects a Public Safety Answering Point based, at least in part, on said Service Area ID.

67. (Previously Presented) A user equipment (UE) in a packet switched wireless communications network, the user equipment (UE) adapted to carry a method comprising:

 sending a first request to setup a call to a first network element in the packet switched wireless communication, said request including a request for location information of the user equipment (UE); and

 receiving location information obtained by a second network element in the radio access network.